

Agri-Robots at Work: Critical Perspectives on Labour, Capital and the Political Ecologies of agricultural robotisation

Convenor:

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Topic:

Work in the agri-food sector is confronted with the combined pressures of demographic change, economic concentration, environmental requirement, and digital innovation. Robotics is increasingly promoted as a necessary driver of agri-food system transformation, building on and addressing these pressures. Yet, beyond technological performance, agricultural robotics raises fundamental research questions about the meaning and organisation of work, the relation between labour and capital, and the ecological and social pathways for the future of farming. While often discussed in terms of innovation, transformation or driver of change, the development of agricultural robotics is also raising the question of whether and how it may serve as a factor of permanence for economic and social structures as well as cultural practices and landscapes.

This working group seeks to interrogate:

- The relationship between agricultural workers/farmers and robots: what does it reveal about labour-capital dynamics in the contemporary agri-food system?
- The meanings of robotised agricultural work: how different actors (farmers, industry, policymakers, NGOs) perceive and mobilise robotics in their visions of agri-food system transformation (from convivial agroecological technologies to ecological modernisation and techno-optimism).
- Emancipatory perspectives: what remains of the cyborg figure (Haraway) and how can responsible innovation and just transitions contribute to inclusive and sustainable agricultural futures?
- Political ecologies of robotisation: how do power, inequality, and ecological concerns intersect in the development and use of agricultural robotics?
- Robotisation in the broader context of digitalisation: how robotics relates to platforms, datafication, surveillance, and new forms of rentiership in agriculture.

Aims

The working group will contribute to critical agricultural research on digitalisation and automation by:

- Bringing together empirical and theoretical contributions examining labour, meaning, inclusion, and political ecologies of robotisation in agriculture and food systems.
- Fostering dialogue across disciplines including agrarian studies, STS, political ecology, labour studies, and responsible innovation research.

- Mapping competing narratives and imaginaries of agricultural robotisation (automation as emancipation, domination, ecological transition, or platform capitalism).
- Exploring how agricultural robotics can be understood not only as technical artefacts but also as socio-political projects with implications for justice, sustainability, cultural heritage, and the transformation of agri-food systems.

Format

The working group will be organised as paper sessions in peer-discussant format, followed by plenary discussions. Draft papers will be circulated before the symposium. Each contribution will be introduced and discussed by another participant. Author(s) will respond and complement the discussion with further insights. This format is designed to foster dialogue, constructive critique, and collective reflection to serve as groundwork for a special issue or collective volume.